

DOCUMENT RESUME

ED 472 993

EA 032 328

AUTHOR Brown, Kara S.  
TITLE Instructional Personnel. Revised. Trends and Issues.  
INSTITUTION ERIC Clearinghouse on Educational Management, Eugene, OR.  
SPONS AGENCY Office of Educational Research and Improvement (ED),  
Washington, DC.  
PUB DATE 2002-00-00  
NOTE 12p.  
AVAILABLE FROM ERIC Clearinghouse on Educational Management, 5207 University  
of Oregon, Eugene, OR 97403-5207. Tel: 541-346-2332; Tel:  
800-438-8841 (Toll Free); Fax: 541-346-2334; Web site:  
<http://eric.uoregon.edu>. For full text:  
[http://eric.uoregon.edu/trends\\_issues/instpers/index.html](http://eric.uoregon.edu/trends_issues/instpers/index.html).  
PUB TYPE ERIC Publications (071) -- Reports - Descriptive (141)  
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.  
DESCRIPTORS \*Educational Quality; Elementary Secondary Education; Faculty  
Development; Professional Recognition; Teacher Competencies;  
\*Teacher Effectiveness; Teacher Improvement; \*Teacher  
Shortage; \*Teachers

ABSTRACT

This article discusses how rising student enrollment and a projected wave of teacher retirements will affect the teacher corps. It describes the possible shortage of teachers in the upcoming years as a problem more of specialization than outright shortage. Math and science teachers and special-education teachers will be hardest to find, as will be teachers from minority groups. Some possible remedies to these difficulties include linking teacher standards with salaries, creating national recruitment initiatives, and expanding teacher-education programs in high-need fields. The paper focuses on teacher quality and its vital importance in education. High-quality teachers must have basic skills, must pass licensure tests, and must possess experience. Finding high-quality teachers begins with the hiring process. The best hiring systems identify the teacher skills most wanted in the classroom and validate the selection process to ensure it is effective. Once hired, teachers must be given professional development to help them excel in the classroom and encourage them to remain a teaching professional. School leaders should see staff development as an ongoing process and should enable teachers to become self-directed in a culture that values professional collegial interaction. (Contains 16 references.) (RJM)

## Trends and Issues Instructional Personnel

### ERIC Clearinghouse on Educational Management

College of Education · University of Oregon  
5207 University of Oregon  
Eugene OR 97403-5207  
541-346-2332 · 800-438-8841  
Fax: 541-346-2334

This document is available on our website: <http://eric.uoregon.edu>  
2002

EA032328

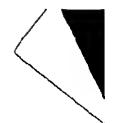
U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- \* Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



BEST COPY AVAILABLE



## Trends and Issues Instructional Personnel

*Revised 2002*

*The discussion on Instructional Personnel was written by Kara S. Brown.*

*Kara Brown graduated with a B.A. in government from Cornell University (1993) and then received a J.D., cum laude, from Vermont Law School in 1998. Most recently, she was a Public Law Research Fellow at U.C. Hastings College of the Law.*

An estimated 2.2 million teachers will be needed in the next decade to teach over 48.1 million students (Protheroe, Lewis, and Paik 2002). This need, taken with an increased emphasis on accountability and recent studies indicating that teacher quality is one of the most important factors affecting student achievement, presents school administrators with a challenge. Locating, hiring, and retaining quality teachers will be of vital importance in the coming decade.

### **Recruitment and Retention**

Rising student enrollment levels and the possibility of a wave of teacher retirements has led some to fear that a teacher shortage is looming. "More than one-quarter of teachers are at least 50 years old, and nearly half will retire over the next decade" (Hirsch, Koppich, and Knapp citing National Center for Education Statistics, *Projection of Education Statistics to 2008*). At the same time, student enrollment levels are increasing in most states, and some states, such as California, Nevada, and New Mexico, are projected to have double-digit enrollment increases (Hirsch, Koppich, and Knapp citing National Center for Education Statistics, *Projection of Education Statistics to 2008*).

Although the number of prospective teachers enrolled in teacher-preparation programs exceeds the number of teacher vacancies (200,000 enrolled compared to 150,000 vacancies), many prospective teachers do not actually enter the teaching profession. Approximately 60 percent of those prepared to teach actually enter the profession, and of those, 30-50 percent leave within the first five years (Hirsch, Koppich, and Knapp 2001).

It is unclear whether the combination of these factors will lead to an overall teacher shortage. Nevertheless, shortages exist now in certain subject areas and geographical locations. These staffing needs are generally most pressing at the nation's high-poverty schools (Archer 2002).

As Lynn Olson (2000) reports, "the United States does not have an overall 'teacher shortage,'" but instead has "problems of distribution in the supply of teachers." "Too few teachers are available in such subjects as special education, bilingual education, mathematics, and science. And too few people are willing to work in schools that are under-funded or in rundown or isolated areas" (Olson 2000). Other researchers have

identified shortages in these same areas (Darling-Hammond 2001; Hirsch, Koppich, and Knapp 2001).

In addition to geographical and subject-matter shortages, schools also face a shortage of minority teachers. "Ethnic teachers currently represent about 9 percent of U.S. public school teachers, but that number is expected to drop to less than 5 percent in the coming years. Meanwhile, ethnic students constitute 40 percent of the total student body in the United States, and this proportion is expected to increase significantly" (Jorgenson 2001).

Jorgenson attributes this shortage, in part, to educational inequities in today's schools. Underprivileged and minority students who attend the nation's most impoverished schools, he argues, are not prepared to aspire to teaching careers and have little incentive to return to the schools they attended.

To attract more minority candidates to the profession, Jorgenson suggests that districts:

- Prioritize the recruitment of ethnic educators.
- Consider nontraditional sources of teacher recruitment.
- Expedite the application materials of ethnic applicants.
- Discuss the possibility of offering hiring bonuses for ethnic candidates.
- Develop a paraprofessional-to-teacher program.
- Understand how ethnically diverse employees perceive the district.
- Create a support network for educators of color.

To attract more teachers generally, raising salaries is imperative, many people believe. Lynn Olson (2000) reports that young teachers with bachelor's degrees earned \$8,192 less in 1998 than nonteachers with a comparable education. This salary gap was even more pronounced for older teachers with master's degrees, who earned \$32,511 less than their nonteaching counterparts did (Olson 2000). "'You cannot be living in the United States. . . and not believe that teacher salaries are a great disincentive to educated people entering the profession,' argues Sandra Feldman, the president of the American Federation of Teachers" (Olson 2000).

In response to these concerns, some states have raised salaries across the board or offered increased salaries to beginning teachers (Olson 2000). States also increasingly offer scholarships and loan-forgiveness programs to new teachers, as well as cash bonus incentives (Olson 2000).

Critics argue that these approaches may fail to draw teachers to areas where they are most needed. Many believe that districts should offer additional compensation to those who teach hard-to-staff subjects, such as science and math, as well as to "those willing to work in hard-to-staff schools or districts; those who graduate from better colleges or post higher test scores; and those who possess greater knowledge and skills or raise student achievement" (Olson 2000). Some states have begun addressing these concerns and "are offering signing bonuses, housing assistance, free graduate courses and other incentives to attract teachers to the hardest to staff areas" (Hirsch, Koppich, and Knapp 2001).

Many states are also seeking to expand their applicant pool by establishing alternative pathways into the profession. The National Center for Education Information (NCEI)

reports that forty-one states and the District of Columbia have some type of alternative teacher certification (Hirsch, Koppich, and Knapp 2001). There are over one hundred such programs available nationwide for those with a bachelor's degree seeking to become licensed teachers (Hirsch, Koppich, and Knapp 2001). "NCEI estimates that 75,000 people have been licensed through these programs, with 25 states reporting an increase in the number of alternative licensees over the last five years" (Hirsch, Koppich, and Knapp 2001).

In the same vein, a recent study indicates that teachers from nontraditional backgrounds, such as paraprofessionals, uncertified teachers, Peace Corps alumni, and others, are often "eager but overlooked prospects" (Blair 2002). Once certified, however, they "outperform their colleagues... and stay longer in teaching positions than their peers" (Blair 2002). Researchers found both larger and more racially diverse groups of potential recruits than they had expected, and found the individuals to be of exceptionally high caliber (Blair 2002). Similar programs allowing prospective teachers to pursue alternative routes to teaching have also shown promise in attracting more "minority teachers, math and science teachers, and candidates willing to work in urban schools" (Olson 2000).

Other reasons for teacher shortages may include cumbersome hiring practices, "redundant requirements" for qualified and credentialed teachers from other states, "late budget decisions and teacher-transfer provisions..., a lack of pension portability across states, and a loss of salary credit for teachers who move" (Darling-Hammond 2001). States are addressing some of these concerns by creating uniform hiring and application processes statewide and establishing centralized state education-employment databases on the Internet (Hirsch, Koppich, and Knapp 2001).

Darling-Hammond (2001) offers the following additional suggestions for addressing teacher shortages:

- Link teacher standards with salaries.
- Create service scholarship programs to prepare high-ability candidates in shortage fields.
- Establish licensing reciprocity across states.
- Create national recruitment initiatives.
- Streamline hiring procedures and develop online information technologies.
- Expand teacher education programs in high-need fields.
- Provide incentives for more extended (five-year and fifth-year) teacher education programs.
- Provide incentives for college pathways that prepare paraprofessionals for certification.
- Create high-quality induction programs.
- "Just say no" to hiring unqualified teachers.

Richard M. Ingersoll, a University of Pennsylvania researcher, argues that administrators should focus on stemming teacher turnover rather than trying to increase the applicant pool (Viadero 2002). Ingersoll found that teachers leave their jobs at a rate of 13.2 percent a year, compared with 11 percent in other professions (Viadero 2002).

Most teachers, approximately 20-30 percent, depart within the first five years (Viadero 2002, Wadsworth 2001, Darling-Hammond 2001).

High turnover rates cost school districts money in recruiting, hiring, and training replacements and diminish schools' ability to carry out long-term planning, curriculum revision, and reform (Brewster and Railsback 2001). As Ingersoll explains, "It doesn't really solve the problem to recruit thousands of new people into the occupation if, in a few short years, many of them leave. The data tell us that the vast majority of hiring that takes place in any given year is simply replacements for teachers who have just left" (Olson 2000).

Job dissatisfaction is a major reason why teachers leave the profession, with "low salaries, problems with student discipline, and lack of support from school administration given as primary factors" (Protheroe, Lewis, and Paik 2002). Other related reasons teachers give for leaving the profession include "poor working conditions, lack of support, bureaucracy, weak financial incentives, and growing job demands" (Darling-Hammond 2001).

Research shows that providing high levels of support for beginning teachers, through mentoring or teacher-induction programs, can lead to higher rates of retention (Brewster and Railsback 2001, Olson 2000). In California, for example, implementation of a comprehensive teacher-induction program—"California's Beginning Teacher Support and Assessment Program" (BTSA)—proved highly successful in reducing turnover rates (Hirsch, Koppich, and Knapp 2001). Researchers found that those schools participating in BTSA had an attrition rate of 9 percent for beginning teachers within five years compared with a 37 percent turnover rate at schools without BTSA or a similar induction program (Hirsch, Koppich, and Knapp 2001).

Support programs can also result in higher student achievement levels, higher quality teaching, and stronger connections among the teaching staff (Brewster and Railsback 2001). Through such programs, teachers learn effective teaching strategies and develop stronger classroom-management skills, often resulting in increased job satisfaction (Brewster and Railsback 2001).

As of 1999, "38 states and the District of Columbia had established some sort of induction program targeted at supporting beginning teachers" (Hirsch, Koppich, and Knapp 2001). The substance of such programs varies widely from state to state, as does the percentage of teachers actually participating in such programs (Hirsch, Koppich, and Knapp 2001). Reasons that some districts do not provide induction programs may include inadequate funding or a lack of staff training and administrative support (Brewster and Railsback 2001).

## Teacher Quality

Teacher quality is emerging as "the most important ingredient in students' achievement," according to recent studies (Protheroe, Lewis, and Paik 2002; U.S. Department of Education 2000). Linda Darling-Hammond found that "the strongest predictor of how well a state's students performed on national assessments was the percentage of well-qualified teachers: educators who were fully certified and had majored in the subjects they taught" (Olson 2000).

A study conducted by Harvard economist Ronald Ferguson similarly concluded that differences in achievement levels between the students he studied could be "explained almost entirely" by differences in teachers' qualifications (Protheroe, Lewis, and Paik 2002). According to Ferguson, "Every additional dollar spent on more highly qualified teachers. . . netted greater increases in student achievement than other, non-instructional uses of school resources" (Protheroe, Lewis, and Paik 2002).

There is also evidence that ineffective teaching can have a lasting impact on student achievement levels. A study led by William Sanders found that "elementary school students taught by ineffective teachers three years in a row score significantly lower than students taught by highly effective teachers" (Protheroe, Lewis, and Paik 2002). Researchers found that "three years in a row with poor teachers almost wiped out a student's chances of keeping up in school" (Protheroe, Lewis, and Paik 2002).

Although research indicates the importance of having qualified teachers in the classroom, evaluating teacher quality can a difficult task. According to Jeffrey Archer, more large-scale, controlled studies are needed to identify what type of training makes teachers most effective. Currently, policymakers can interpret research findings in conflicting ways (Archer 2002).

Most agree that basic skills are one of the most important indicators of teacher quality (Archer 2002). "Research suggests that, at a minimum, teachers should have a solid general education and know their subjects. Students whose teachers know their subjects perform better than students whose teachers lack subject-matter preparation" (Olson 2000).

Another factor that enhances teacher quality is experience. "Studies suggest that students learn more from experienced teachers than they do from less experienced teachers" (U.S. Department of Education 2000). Research also suggests that teachers who teach in the field in which they received their training and those who participate in high-quality induction and professional development programs are more effective than those who do not (U.S. Department of Education 2000).

Most states require teachers to pass licensure tests, but few of these tests go beyond multiple-choice questions (Boser 2001). Critics complain that the basic-skills tests administered to prospective teachers are too easy—measuring verbal and mathematical achievement at about the tenth-grade level (Olson 2000). Moreover, they argue that states set passing scores too low and create loopholes to allow teachers who fail into the classroom (Olson 2000).

Critics also take issue with "convoluted licensing requirements" that they believe do not actually guarantee competence and "deter bright college graduates and would-be career-switchers" (Olson 2000).

Notwithstanding this debate, many states allow schools to employ unlicensed teachers on an emergency basis to meet staffing needs (Olson 2000). "More than one-fourth of teachers enter the profession without having fully met state licensing standards, according to the National Commission on Teaching & America's Future. Twelve percent of new teachers are hired with no license at all, while another 15 percent hold temporary, provisional, or emergency licenses" (Olson 2000).

A related problem is teachers' teaching subjects in which they have little or no training. "About a third of U.S. teachers each year are assigned at least one class a day for which they have not been trained" (Olson 2000). This practice is especially prevalent in

"high-poverty schools and small schools, among beginning teachers, and for middle school students and children of all ages who are in lower-track academic classes" (Olson 2000, U.S. Department of Education 2000).

Protheroe, Lewis, and Paik (2002) suggest that to ensure quality teaching, administrators should:

- Make sure that each school has an equitable distribution of competent teachers.
- Select and support principals who know how to establish a collaborative, instructionally focused school environment.
- Give schools the autonomy and support to create professional learning environments for teachers.
- Provide schools with high-quality expertise as part of consistent, intensive professional development.
- Hold teachers responsible for student achievement schoolwide.

## Hiring

In addition to difficulties in locating and identifying high-quality teachers, the hiring process can prove challenging as well. Trimble identifies two major obstacles administrators face in hiring the best applicants. First, the "pool may lack the two qualifications associated with high student achievement: full teaching certification and the equivalent of a major in the subject to be taught" (Trimble 2001). Second, "the applicant pool often lacks teachers who are experienced in classroom situations that require a range of instructional, managerial, cultural, ethical, and interpersonal skills, often in time-sensitive situations" (Trimble 2001).

When faced with these challenges, Trimble suggests administrators develop skills to spot applicants' potential. Accordingly, she recommends that administrators look for applicants who possess a strong work ethic, people skills, and communication skills (Trimble 2001).

Protheroe, Lewis, and Paik (2002) suggest that principals and others involved in the hiring process familiarize themselves with research about effective teaching so "they will have a better idea of what they are looking for and interviews can focus on these critical factors." They recommend that districts examine their hiring process "to ensure that it helps, rather than hinders, efforts to hire well-qualified teachers" (Protheroe, Lewis, and Paik 2002).

The "best hiring systems":

- Identify those attitudes, behaviors, and skills that characterize the kind of teachers most wanted in the classrooms.
- Screen for these characteristics at every stage of data collection and candidate evaluation.
- Validate the selection process to ensure that it predicts excellence in classroom and professional performance.
- Ensure that the hiring process complies with federal, state, and local laws.

- Eliminate unproductive paperwork so that the best candidates have confidence in the speed and skill of the system recruiting them.
- Automate the process whenever possible to reduce staff time spent on clerical tasks.
- Reserve labor-intensive personal evaluative techniques only for the most promising candidates.
- Provide prompt, accessible, and accurate information to candidates at all stages of the hiring process.
- Give decision-makers accurate and timely information about the overall process and its results. (Protheroe, Lewis, and Paik 2002)

## Professional Development

Professional development plays an important role in creating and retaining quality teachers. Most teachers participate in such activities in some form; the U.S. Department of Education reported that, as of 1998, 99 percent of teachers had participated in a professional development program within the preceding 12-month period (U.S. Department of Education 2000).

The duration of their participation, however, was very limited; most teachers participated between one to eight hours, or for no more than one day (U.S. Department of Education 2000). This limited participation is at odds with research showing that "the quality and duration of professional development programs is an important determinant of their ability to improve teaching practice and impact student achievement" (Hirsch, Koppich, and Knapp 2001).

According to the U.S. Department of Education, "there is broad consensus about the elements that constitute an effective professional development program." Successful programs:

- Focus on individual, collegial, and organizational improvement.
- Promote continuous inquiry and improvement embedded in the daily life of schools.
- Are planned collaboratively by those who will participate in and facilitate that development.
- Require substantial time and other resources.
- Are driven by a coherent long-term plan. (U.S. Department of Education 2000)

Research also suggests such programs should be "school-based, preferably embedded in instructional efforts through collaborative analysis of student work" (Protheroe, Lewis, and Paik 2002). The National Staff Development Council recommends professional development that is "results-driven, standards-based, job-embedded, content-rich, and school-focused" (Hirsch, Koppich, and Knapp 2001).

Teacher supervision plays an important role in successful professional development by providing teachers with feedback regarding effective classroom practices (Wanzare and da Costa 2000). Four key strategies have emerged for enhancing the professional growth of teachers through supervision (Wanzare and da Costa 2000).

First, staff development should be an ongoing process, "supported by modeling, coaching, and collaborative problem-solving," and should focus on ways to link new information to existing knowledge, experience, and values (Wanzare and da Costa 2000). Teachers should be provided enough time to make development part of their normal teaching responsibilities (Wanzare and da Costa 2000).

Second, "teachers need to engage, both individually and in groups, in the concrete tasks of teaching, observation, assessment, experimentation, and pedagogical reflection," to gain a broader understanding of "the learning and development processes given their teaching contexts and students" (Wanzare and da Costa 2000).

Third, with the goal of enabling teachers to become self-directed, administrators "should match appropriate supervisory approaches to teachers' levels of developmental needs" (Wanzare and da Costa 2000).

Finally, to "promote the spread of ideas and shared learning," administrators should "work to establish a culture that values professional, collegial interactions among participants (e.g., team planning, sharing, evaluation, and learning to create methods for peer review of practice)" (Wanzare and da Costa 2000).

Kay Burke (2000) advocates "results-based professional development" to facilitate implementation of innovative classroom practices and to eliminate overemphasis on a one-size-fits-all approach to professional development. Hallmarks of results-based professional development include an emphasis on collaboration, an ongoing rather than episodic process, the establishment of measurable goals, and the creation of professional development plans (including timelines) to reach these goals. Teachers then engage in data collection and evaluation.

According to Burke (2000), "this staff development not only must affect the knowledge, attitudes, and practices of individual teachers, administrators, and other school employees, but it also must alter the cultures and structures of the organizations in which those individuals work" (Burke 2000).

Many states that require professional development for license renewal do not specify particular types of programs, but instead monitor the number of hours that teachers participate (Hirsch, Koppich, and Knapp 2001). This approach is also prevalent at the district level, where, due to financial concerns and lack of guidance, administrators "tend to rely on one-time, in-service and workshop models rather than on the intensive, ongoing professional development research that has been shown to be more effective" (Hirsch, Koppich, and Knapp 2001).

Hirsch, Koppich and Knapp (2001) found that "although 96 percent of public school teachers reported participating in professional development activities, only 30 percent participated in professional development that involved in-depth study in a specific field, and only 15 percent received nine hours or more of this type of training" (Hirsch, Koppich, and Knapp).

## References

- Archer, Jeff. "Research: Focusing in on Teachers." *Education Week* (April 3, 2002).
- Blair, Julie. "Program Finds New Teachers in Unexpected Places: Schools." *Education Week* (Jan. 16, 2002).
- Boser, Ulrich. "Teacher Quality." *Education Week* (last updated May 1, 2001).
- Brewster, Cori & Railsback, Jennifer. "By Request . . . Supporting Beginning Teachers: How Administrators, Teachers, and Policymakers Can Help New Teachers Succeed." Northwest Regional Educational Laboratory (March 2001). EA 031 416.
- Burke, Kay. "Results-Based Professional Development." *NASSP Bulletin*, Vol. 84, No. 618 (October 2000) 29-37.
- Darling-Hammond, Linda. "The Challenge of Staffing Our Schools." *Educational Leadership* (May 2001) 12-17.
- Harman, Ann E. "A Wider Role for the National Board." *Educational Leadership* (May 2001) 54-55. ED 538 657.
- Hirsch, Eric, Koppich, Julia E. & Knapp, Michael S. "Revisiting What States are Doing to Improve the Quality of Teaching: An Update on Patterns and Trends." Working Paper, Center for the Study of Teaching and Policy, University of Washington, in conjunction with the National Conference of State Legislatures (February 2001).
- Jorgenson, Olaf. "Supporting a Diverse Teacher Corps." *Educational Leadership* (May 2001) 64-67. ED 538 660.
- Olson, Lynn. "Teacher Quality: Finding and Keeping Competent Teachers." *Education Week Quality Counts 2000: Who Should Teach?* (2000).
- Protheroe, Nancy, Lewis, Ann, and Paik, Sandra. "Promoting Quality Teaching." *ERS Spectrum*, Winter 2002.
- Trimble, Susan. "The Teacher Applicant Pool: What Top Administrators Seek" *Principal Leadership* (March 2001) 44-47.
- U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. Statistical Analysis Report, "Monitoring School Quality: An Indicators Report." December 2000. EA 030 894.
- Viadero, Debra. "Researcher Skewers Explanations behind Teacher Shortage." *Education Week* (April 10, 2002).

Wadsworth, Deborah. "Why New Teachers Choose to Teach." *Educational Leadership* (May 2001) 24-28.

Wanzare, Zachariah and da Costa, Jose L. "Supervision and Staff Development: Overview of the Literature." *NASSP Bulletin*, Vol. 84, No. 618 (October 2000) 47-54.



*U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)*



## **NOTICE**

### **Reproduction Basis**

- This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
  
- This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").